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**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION**

**FACT SHEET**

(pursuant to NAC 445A.236)

**Permittee Name:** City of Reno  
Reno Public Works Department  
P.O. Box 1900, Reno, NV 89505

**Permit Number:** NV0023132

**General:**

The Permittee operates a groundwater pump and treat remediation system. Groundwater in the vicinity is contaminated with petroleum hydrocarbons from a former underground storage tank system. Groundwater is pumped from groundwater well # GRW-1 through an oil/water separator and then into a 500 pound activated carbon canister (Canister #1) and then into a second 500 pound activated carbon canister (Canister #2). Canister #2 then discharges into the Reno stormdrain system which discharges to the Truckee River. The point of sampling has been changed from the discharge of Canister #2 to the discharge point at Canister #1. Sampling between the Canisters allows the Permittee to renew the activated carbon as it becomes spent, thus keeping the remedial process ongoing without violation of the permit parameters.

**Receiving Water Characteristics:**

The receiving water is the Truckee River between the downstream “East McCarran” monitoring station and the upstream “Idlewild” monitoring station. Beneficial uses of the Truckee River include: irrigation; watering of livestock; recreation involving contact with the water; recreation not involving contact with the water; industrial supply; municipal or domestic supply, or both; propagation of wildlife; and propagation of aquatic life. The aquatic life species of concern for the Truckee River are listed in Nevada Administrative Code (NAC) 445A.183. The receiving water is of good quality.

**Description of the Location of the Discharge:**

The remediation system discharges to the City of Reno stormdrain system, which discharges to the Truckee River.

**Characteristics:**

Primary constituents of concern for this remediation project, which will be monitored prior to discharge are total petroleum hydrocarbons, benzene, toluene, xylene, ethylbenzene, MTBE and volatile organics.

**Flow:**

The daily maximum flow limitation is 5 gallons per minute, 0.0072 million gallons (7,200 gallons) per day.

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**DRAFT****Quantities:**

Limits for Total Nitrogen, Total Phosphorous and Total Dissolved Solids are established in NAC 445A.186 (RMHQs). The limits, based on a flow of 7,200 gallons per day, are 0.018 lb/day (annual average) 0.003 lb/day (annual average), and 5.4 lb/day (annual average), respectively.

**Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the waters of the State of Nevada subject to the conditions contained within the permit, was published in the **March 24, 2006** edition of the **Reno Gazette-Journal**. The notice was also mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit could have done so in writing for a period of 30 days following the date of the public notice.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Effluent Limitations:****TABLE I.1: Effluent Limitations**

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow (MGD)	0.0060	0.0072	Continuous	Flow meter
TPH (8015 Mod.)	1 mg/l		Monthly	Discrete
Benzene (by 8260)	5 µg/l		Monthly	Discrete
Toluene (by 8260)	100 µg/l		Monthly	Discrete
Ethylbenzene (by 8260)	100 µg/l		Monthly	Discrete
Xylene (by 8260)	200 µg/l		Monthly	Discrete
MTBE (by 8260)	20 µg/l		Monthly	Discrete
pH	7.0 - 8.5 S.U.		Monthly	Discrete
Total Phosphates as P mg/L	0.05 (0.003 lb/day) <sup>1</sup>		Monthly	Discrete
Total Nitrogen as N mg/L	0.3 (0.018 lb/day) <sup>1</sup> , 0.43 (0.026 lb/day) <sup>2</sup>		Monthly	Discrete

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	<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Dissolved Solids mg/L	90 (5.4 lbs/day) <sup>1</sup> , 120 (7.2 lbs/day) <sup>2</sup>		Monthly	Discrete
Water Quality Analysis (Attachment A)	Monitor & Report		Fourth Quarter	Discrete
Full Scan VOC's (by 8260)	Drinking Water Standards <sup>3</sup>		Fourth Quarter	Discrete

<sup>1</sup>: Annual Average <sup>2</sup>: Single Value (Daily Maximum)

<sup>3</sup>: Any exceedances of Drinking Water standards shall be reported in DMRs

### **Schedule of Compliance:**

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. **Within thirty (30) days of permit issuance (May 23, 2006),** the Permittee shall submit an updated groundwater remediation system Operation and Maintenance Manual for review and approval.

### **Rationale for Permit Requirements:**

Monitoring is required to assess the level of treatment being provided and to determine when design capacity is being approached. Monitoring requirements for total nitrogen, total phosphorous and total dissolved solids with limits of 0.5 lb/d, 0.5 lb/d and 50 lb/d, respectively, had been established in accordance with the Division's August 24, 1993 Memorandum regarding remediation project discharges to the Truckee River. This memo was intended for short term remediation projects, not to exceed three years. Therefore the new limits are set to be in compliance with NAC 445A.186, *Truckee River at East McCarran. Standards of Water Quality (RMHQs)*.

The pH limitations (7.0 to 8.5 S.U.; RMHQ) are established in NAC 445A.186. Although the limitations have been exceeded on several occasions, as indicated in DMRs submitted as required by permit conditions, the Division has determined that it would be preferable to exceed the pH RMHQ than to add salts/caustics to adjust the pH of a discharge to a waterway with a TDS TMDL. Any excursion of the RMHQ will be evaluated against the beneficial use standard set in NAC 445A.186 (6.5 to 9.0 S.U.) of magnitude and frequency of excursion to determine the effect of non-compliance on the affected beneficial uses being protected.

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**Proposed Determination:**

Division has made the tentative determination to issue (renew) the proposed permit for a five (5) year period.

Prepared by: James T. Hogan  
Staff Engineer II.

March 2006

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**Attachment A -Annual Discharge Water Quality Analysis**  
**NV0023132 - City of Reno Police Department**

Monitoring Year:  
(due with 4th Qtr. Report)

Analyte	Lab Result	Water Quality Standard*	WQS Type*
Antimony	mg/l	0.146 mg/l	Domestic/Municipal
Arsenic	mg/l	0.05 mg/l	Domestic/Municipal
Barium	mg/l	2 mg/l	Domestic/Municipal
Beryllium	mg/l	0 mg/l	Domestic/Municipal
Boron	mg/l	0.75 mg/l	Irrigation
Cadmium	mg/l	0.005 mg/l	Domestic/Municipal
Chromium	mg/l	0.1 mg/l	Domestic/Municipal
Copper	mg/l	0.005 mg/l	Chronic Aquatic Life
Cyanide	mg/l	0.2 mg/l	Domestic/Municipal
Flouride	mg/l	1 mg/l	Irrigation
Iron	mg/l	1 mg/l	Aquatic Life
Lead	mg/l	0.00028 mg/l	Chronic Aquatic Life
Manganese	mg/l	0.2 mg/l	Irrigation
Mercury	mg/l	0.000012 mg/l	Chronic Aquatic Life
Molybdenum	mg/l	0.019 mg/l	Aquatic Life
Nickel	mg/l	0.0066 mg/l	Chronic Aquatic Life
Selenium	mg/l	0.005 mg/l	Chronic Aquatic Life
Silver	mg/l	0.001 mg/l	Aquatic Life
Zinc	mg/l	0.0457 mg/l	Chronic Aquatic Life
Chlorides	mg/l	10 mg/l	RMHQ
Total Phosphorus as P	mg/l	0.05 mg/l	RMHQ
Ortho Phosphorus	mg/l	0.02 mg/l	RMHQ
Total Nitrogen	mg/l	0.43 mg/l	RMHQ
Total Dissolved Solids	mg/l	120 mg/l	RMHQ
Turbidity	NTU	6 NTU	RMHQ
Alkalinity (as CaCO3)	mg/l	mg/l	Beneficial Use Standard
Total Suspended Solids	mg/l	15 mg/l	RMHQ
Sulfate	mg/l	8 mg/l	RMHQ
Dissolved Oxygen	mg/l	6 mg/l	Beneficial Use Standard
Sodium – SAR	SAR	0.6 SAR	RMHQ

RMHQ = Requirement to Maintain Existing Higher Quality – NAC 445A.186

Note: Analyses shall have detection limits at or below the water quality standard listed on the attachment.

\* The Water Quality Standard listed is the most stringent for the Beneficial Uses of the Truckee River at East McCarran.

Aquatic Life Standards use a Hardness of 45 mg/l as CaCO3 in the calculations when applicable. Water Quality Standards are listed for reference only and are not considered limits at this time. Actual values as determined from sample event will establish the actual constituent value the standard requires (see NAC 445A.118, NAC 445A.144).

Full Range VOC's	Attach Lab Sheets (Analysis by 8260 + MTBE)
TPH - Full Range	Attach Lab Sheets (Analysis by 8015 Modified)

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment.

Name/Title (Typed or Printed)

Date

Signature